ϕ^{γ}

the three vertical rows on the side of the row having the minimum brightness level remote from the row having the maximum brightness level having a brightness level of about 80% of the maximum brightness level.

REMARKS

The claims have been edited for clarification. Applicant has not made any change which in any way is related to the cited prior art.

The examiner has rejected the claims as anticipated or as being obvious over Juvinal. Juvinal discloses a light source that has a single brightness level. It is shown as a single light bulb. It is accordingly impossible for the Juvinal light source to anticipate claim 1. Claim 1 clearly provides that it is the illumination area of the light source that has a variety of intensities. Claim 1 originally provided for "means for defining a ... continuously varying intensity ... on said light source illumination area" Amended claim one says the same thing with pieces being rearranged for clarity. Juvinal achieves a variety of intensities by interposing a special filter between the light source and the object. Juvinal accordingly does not teach the claimed invention nor does Juvinal make obvious the claimed invention. Juvinal is just a different solution.

It is accordingly believed that this application is in condition for allowance.

VERSION WITH MARKINGS TO SHOW CHANGES

IN THE TITLE

After "CONTAINER INSPECTION MACHINE" insert -- USING LIGHT SOURCE HAVING SPATIALLY CYCLICALLY CONTINUOUSLY VARYING INTENSITY --.

IN THE SPECIFICATION

Page 1, lines 12-13, after "09/026,311" insert -- , now U.S. Patent No. 6,031,221 --.

Page 2, line 20, change "pivel" to -- pixel;

Page 2, line 26, change "maged" to -- imaged --.

IN THE CLAIMS

1(Amended). A machine for inspecting the wall of a bottle comprising

a conveyor for supporting a bottle at an inspection station, the inspection station including

- a CCD camera on one side of the conveyor having a camera image,
- a light source, having an illumination area, on the other side of the conveyor, for imaging the bottle on said CCD

camera image [means],

means for defining on said illumination area [a spatially cyclically continuously varying] light intensit[y]ies varying between a minimum brightness level that will permit the identification of a light blocking defect [therebehind] and a maximum brightness level, [light on said light source illumination area] the brightness level varying spatially, cyclically, and continuously at a rate of change which is less than [that required to be] a rate of change that would be identified [detected] as a defect,

computer means for analyzing said camera image by comparing neighboring pixels [(one or more away) alone or in combination] to determine the rate of change in [intensity] brightness level to identify defects where the rate of change exceeds a defined value.

3(Amended). A machine for inspecting the wall of a bottle according to claim 2, wherein said plurality of L.E.D. rows define a plurality of row groups each including a [light] row having a maximum brightness level [at one side], a row having a minimum brightness level, at least one row intermediate said [white] row having said maximum brightness level and said row having said minimum brightness level [rows] having a[n intensity] brightness level between said minimum brightness level and [white] said maximum brightness level, and at least one row on the side of [said minimum brightness] the row having the minimum brightness

<u>level</u> remote from said [white] row <u>having the maximum brightness</u>

<u>level</u> having a[n intensity] <u>brightness level</u> between <u>the minimum</u>

brightness level and [white] the maximum brightness level.

- 4. A machine for inspecting the profile and wall of a bottle according to claim 3, wherein there are a plurality of vertical L.E.D. rows intermediate the <u>row having the minimum brightness level</u> and [white] the row[s] <u>having the maximum brightness level</u> and the [intensity] <u>brightness level</u> of said plurality of intermediate rows uniformly reduces from the [white] row <u>having the maximum brightness level</u> to the [minimum brightness] row having the minimum brightness level.
- 5. A machine for inspecting the profile and wall of a bottle according to claim 4, wherein there are a plurality of vertical L.E.D. rows on the side of said <u>row having the minimum brightness level</u> [row] remote from said [white] row <u>having the maximum brightness level</u> and the [intensity] <u>brightness level</u> of said plurality of said rows on the side of said <u>row having the minimum brightness level</u> [row] remote from said [white] row <u>having the maximum brightness level</u> uniformly increas[e] ing in [intensity] <u>brightness level</u> proceeding away from the <u>row having the minimum brightness level</u> [row].

- A machine for inspecting the profile and wall of a bottle according to claim 5, wherein [said] the row having the minimum brightness level [row] has a brightness level of about 20% of the maximum brightness level and wherein each of said vertical L.E.D. row groups has three vertical rows intermediate [said] the row having the minimum brightness level and [white rows] the row having the maximum brightness level, with the [intensity of the] row adjacent the row having the minimum brightness level [row] having a[n intensity] brightness level of about 40% of the [white row] maximum brightness level and the [intensity of the] row adjacent the [white] row having the maximum brightness level having a[n intensity] brightness level of about 80% of the [white maximum brightness level row] and the [intensity of intermediate of the three vertical rows intermediate the row having the minimum brightness level [row] and the [white] row[s] having the maximum brightness level having a[n intensity] brightness level of about 60% of the [white row] maximum brightness level.
- 7. A machine for inspecting the profile and wall of a bottle according to claim 6, wherein each of said vertical L.E.D. row groups has three vertical rows on the side of [said] the row having the minimum brightness level [row] remote from [said white] the row having the maximum brightness level, with the [intensity of the] row adjacent the row having the minimum brightness level [row] remote from the row having the maximum brightness level

having a[n intensity] a brightness level of about 40% of the [white row] maximum brightness level and the [intensity of the] next of the three vertical rows on the side of the row having the minimum brightness level remote from the row having the maximum brightness level having a[n intensity] brightness level of about 60% of the [white row] maximum brightness level and the [intensity of] the last of the three vertical rows on the side of the row having the minimum brightness level remote from the row having the maximum brightness level [remote from the minimum brightness row] having a[n intensity] brightness level of about 80% of the [white row] maximum brightness level.

Respectfully submitted,

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